

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD claim 16, and AMEND claims 1-15 in accordance with the following:

1. (Currently amended) ~~An improved~~ A process for the preparation of gabalactam of formula

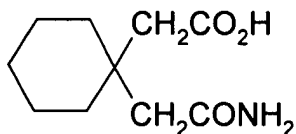
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which comprises

- (i) preparing an aqueous solution of an alkali or alkaline earth metal hydroxide ~~in at a~~ concentration ~~ranging in a range~~ from 10 to 20% by weight, adding bromine to the ~~resulting aqueous~~ solution to ~~give the appropriate yield~~ a corresponding alkali or alkaline earth metal hypobromite solution having a concentration ~~ranging in a range~~ from 5 to 10% by weight,
- (ii) adding 1 part by weight of an amide of the formula 4



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to 7.5 to 9.5 parts by weight of the hypobromite solution ~~of the alkali or alkaline earth metal hypobromite obtained in step (i)~~ during a period in ~~the a range of from~~ 1 to 4 hours, at a temperature in ~~the a range of from~~ -10 to + 10 degrees C to form a mixture,

- (iii) ~~keeping~~ aging the ~~resultant mixture from step (ii)~~ for aging in at the a temperature in ~~the a~~ range ~~of from~~ -10 to +10 degrees C for a period in ~~the a range of from~~ 0.5 to 2 hours,

- (iv) heating the mixture from step (iii) gradually ~~to at~~ a temperature in ~~the a range of from~~ 80

to 100 degrees C, for a period in ~~the~~ a range of 3 to 8 hours and aging for a period in a range from 5 to 8 hours to yield gabalactam,

(v) cooling the ~~reaction mixture of step (iv) to~~ at a temperature in the ~~a range of~~ from 30 to 50 degrees C,

(vi) extracting the mixture of step (v) using a nonpolar organic solvent or a mixture thereof nonpolar organic solvents to yield an organic layer containing gabalactam,

(vii) subjecting the resulting aqueous layer to the steps of (iv) to (vi) defined above to yield additional organic layers containing gabalactam,

(viii) combining the organic layers obtained in steps (vi) & (vii) together,

(ix) washing ~~resulting the~~ combined organic layers with water at a temperature in ~~the~~ a range ~~of from~~ 30 to 35 degrees C, and

(x) distilling of the nonpolar organic solvent or the mixture of nonpolar organic solvents at a temperature in ~~the~~ a range ~~of from~~ 60 to 110 degrees C, under reduced pressure to yield gabalactam.

2. (Currently amended) ~~An improved~~ The process as claimed in claim 1 wherein in step (i) the alkali metal hydroxide is sodium hydroxide.

3. (Currently amended) ~~An improved~~ The process as claimed in claim 1 wherein in step (i) the concentration of the alkali or alkaline earth metal hydroxide solution is in ~~a~~ the range from 10 to 15%.

4. (Currently amended) ~~An improved~~ The process as claimed in claim 1 wherein in step (i) the concentration of the hypobromite solution is in the range ~~of from~~ 5 to 8 %.

5. (Currently amended) ~~An improved~~ The process as claimed in claim 1 wherein in step (ii) the amount of the hypobromite solution used ~~added~~ is in the range ~~of from~~ 8 to 9 parts of the hypobromite solution of sodium hypobromite.

6. (Currently amended) ~~An improved~~ The process as claimed in claim 1 wherein in step (ii) the ~~addition~~ adding is performed during ~~a~~ the period ~~ranging in the range~~ from 1 to 3 hours.

7. (Currently amended) ~~An improved~~ The process as claimed in claim 1 wherein in step (ii) the temperature employed during the ~~addition~~ adding is maintained at the range from -5 to +5

degrees C.

8. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (iii) the aging of the ~~reaction~~-mixture is performed at a the temperature in the range ~~of from~~ -5 to 0 degrees C for a the period in the range ~~of from~~ 0.5 to 1.5 hours.

9. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (iv) the heating is performed at a the temperature in the range ~~of from~~ 80 to 90 degrees C.

10. (Currently amended) ~~An improved~~The process as claimed in claim 9 wherein in step (iv) the heating is performed ~~during for a the period in the range from~~ of 4 to 6 hours.

11. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (v) the cooling is performed ~~to at a the~~ temperature in the range ~~of from~~ 35 to 45 degrees C.

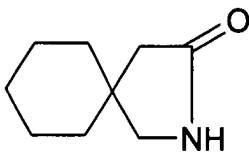
12. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (vi) the ~~extraction is done using an aliphatic or aromatic nonpolar~~ organic solvent and the mixture of nonpolar organic solvents are selected from the group consisting of ~~such as~~ ethylene dichloride, methylene dichloride, hexane and toluene.

13. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (vii) the aqueous layer is once again heated ~~to at a~~ temperature in ~~the a~~ range ~~of from~~ 80 to 100 degrees C during a period of 3 to 8 hours, aged for 5 to 8 hours, cooled and re-extracted with toluene.

14. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (viii) the combined organic layers ~~is are~~ treated with charcoal for removing any coloring matter present, in it.

15. (Currently amended) ~~An improved~~The process as claimed in claim 1 wherein in step (x) the distilling of the nonpolar organic solvent or the mixture of nonpolar organic solvents is ~~done between~~ performed at the temperature in the range from 60 to 90 degrees C under reduced pressure.

16. (New) A process for the preparation of gabalactam of formula 1

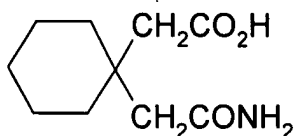


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which comprises

(i) preparing an aqueous solution of sodium hydroxide at a concentration in a range from 10 to 15% by weight, adding bromine to the aqueous solution to yield a corresponding sodium hypobromite solution having a concentration in a range from 5 to 8% by weight ,

(ii) adding 1 part by weight of an amide of the formula 4



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to 8 to 9 parts by weight of the hypobromite solution during a period in a range from 1 to 2 hours, at a temperature in a range from -5 to $+5$ degrees C to form a mixture,

(iii) aging the mixture from step (ii) at a temperature in a range from -5 to 0 degrees C for a period in a range from 0.5 to 1.5 hours,

(iv) heating the mixture from step (iii) gradually at a temperature in a range from 80 to 90 degrees C, for a period in a range of 4 to 6 hours and aging for a period in a range from 5 to 8 hours to yield gabalactam,

(v) cooling the mixture of step (iv) at a temperature in a range from 35 to 45 degrees C,

(vi) extracting the mixture of step (v) using toluene to yield an organic layer containing gabalactam,

(vii) subjecting the resulting aqueous layer to the steps of (iv) to (vi) defined above to yield additional organic layers containing gabalactam,

(viii) combining the organic layers obtained in steps (vi) & (vii) together,

(ix) washing the combined organic layers with water at a temperature in a range from 30 to 35 degrees C, and

(x) distilling of toluene at a temperature in a range from 60 to 65 degrees C, under reduced pressure to yield gabalactam.